

DOCKET NO.: 265563US8PCT/brf

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF:

GROUP: 2629

Hiroiyuki INOKAWA, et al.

SERIAL NO: 10/528,173

EXAMINER: CHOWDHURY, AFROZA Y.

FILED: March 17, 2005

FOR: INPUT DEVICE AND PROCESS FOR MANUFACTURING THE SAME,
PORTABLE ELECTRONIC APPARATUS COMPRISING INPUT DEVICE

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

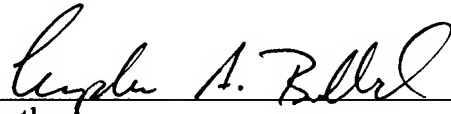
This request is being filed with a Notice of Appeal.

The review is requested for the reason(s) stated on the attached sheet(s). No more than five (5) pages are provided.

I am the attorney or agent of record.

Respectfully Submitted,

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IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :
Hiroyuki INOKAWA, et al. : EXAMINER: CHOWDHURY, AFROZA Y.
SERIAL NO: 10/528,173 :
FILED: MARCH 17, 2005 : GROUP ART UNIT: 2629
FOR: INPUT DEVICE AND PROCESS :
FOR MANUFACTURING THE
SAME, PORTABLE
ELECTRONIC APPARATUS
COMPRISING INPUT DEVICE

REMARKS ACCOMPANYING
PRE-APPEAL BRIEF REQUEST FOR REVIEW

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

SIR:

Appellants respectfully request that a Pre-Appeal Brief Conference be initiated in accordance with the pilot program outlined in the Official Gazette Notice of July 12, 2005.

I. FAILURE TO PRESENT A *PRIMA FACIE* CASE OF OBVIOUSNESS

Appellants submit that the Final Office Action of December 29, 2008 (hereinafter “Final Action”) has failed to provide a *prima facie* case of obviousness under 35 U.S.C. § 103 with respect to Claims 1, 2, 4 or 9-15 of the present application.¹

The Final Action fails to establish a *prima facie* allegation of obviousness in that (1) the Final Action fails to indicate how the combined features of the present invention recited in independent Claims 1, 14 or 15 have any corresponding teachings in the prior art, and (2)

¹ See the Final Action at pages 2-6, detailing the rejection of Claims 1, 2, 4, and 9-15 under 35 U.S.C. § 103(a) as unpatentable over Toda (U.S. Patent Application Publication No. 2003/0146673).

the Final Action fails to provide any factual support for the allegations of obviousness relating to alterations or modifications of the Toda reference.²

Claim 1 recites an input apparatus for detecting that the front surface of a panel is pressed or touched and inputting data corresponding to the detected result. Claim 1 further recites (emphasis added):

a flexible wiring board on which a pattern of predetermined electrodes is formed and in which a pair of through-holes are aligned and formed; and

a piezoelectric actuator made of a piezoelectric bi-morph device, the piezoelectric actuator being configured to bridge the pair of the through-holes in the flexible wiring board, a part of the flexible wiring board being formed between the pair of the through-holes and positioned on the upper surface of the piezoelectric actuator...

The following elements of Claim 1 are **ENTIRELY ABSENT** from Toda:

- (1) a flexible wiring board that includes a pair of through-holes,
- (2) a part formed between the pair of the through-holes in the flexible wiring board; and
- (3) the claimed part of the flexible wiring board is positioned on the upper surface of a piezoelectric actuator that is configured to bridge the pair of the through-holes in the flexible wiring board.

The device of Toda includes none of these features. As described in paragraph [0081] of Toda, Figures 1 and 2 of Toda illustrate cross-sectional views in the vicinities of piezoelectric bodies placed on a touch panel. Toda describes that each piezoelectric body 2 is firmly mounted on a rectangular, nonconducting, nonpiezoelectric substrate 1. A circuit

² It is well established that “[d]uring patent examination the PTO bears the initial burden of presenting a prima facie case of unpatentability.” *In re Glaug*, 283 F.3d 1335, 1338, 62 USPQ2d 1151, 1152 (Fed. Cir. 2002) (citing *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992), and *In re Piasecki*, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984)). “[T]here must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006); see also *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741 (2007) (“To facilitate review, this analysis should be made explicit.”) (citing *Kahn*, 441 F.3d at 988).

board 5 is electrically connected with comb-like electrodes and securely mounted on the top surface of each piezoelectric body 2. As can be seen in Figures 1 and 2 of Toda, the circuit board 5 **does not include a pair of through-holes, does not include a part formed between a pair of through-holes, and is not positioned on an upper surface of a piezoelectric actuator that is configured to bridge a pair of through-holes in the circuit board 5.**

The Final Action provides no factual basis whatsoever in rejecting Claim 1. The Final Action *acknowledges*, at page 3, lines 4-8, that Toda fails to disclose a circuit board that includes the claimed through-holes. However, the Office Action brushes aside these differences by stating that “the flexible wiring board of the piezoelectric device of Toda et al. is formed and positioned on the upper surface of the piezoelectric actuator (see fig. 1, 13) little differently, but The [sic] flexible printed circuit does not easily peel off from the piezoelectric bodies ([0019] - [0021]) and it is well formed and positioned similar to Applicant's flexible wiring board that was formed using a pair of through-holes.”

In essence, rather than address the structural features that are **entirely absent** from Toda, the Final Action states Toda describes a flexible circuit board that is “well formed and similar.” However, a statement as to the quality of the device described in Toda is not a clearly articulated line of reasoning with some rational underpinning as to why it would be obvious to modify Toda to include the through-holes recited in Claim 1. Thus, the Final Action fails to make a *prima facie* case of obviousness in rejecting independent Claim 1.

The Final Action provides no basis whatsoever for rejecting independent Claims 14 or 15. Claim 14 recites a method for producing an input apparatus for detecting that the front surface of a panel is pressed or touched and inputting data corresponding to the detected result. Claim 14 further recites (emphasis added):

forming a pair of through-holes aligned in a flexible wiring board on which a pattern of predetermined electrodes is formed;

inserting a piezoelectric actuator made of a piezoelectric bi-morph device into one of the pair of the through-holes and then the other from the opposite surface side so that both the ends in the longitudinal direction of the piezoelectric actuator contact the same surface of the piezoelectric actuator...

mounting the flexible wiring board on the panel so that the piezoelectric actuator contacts the panel except for a part formed between the pair of the through-holes in the flexible wiring board.

As discussed Toda fails to disclose or suggest a flexible wiring board that includes a pair of through-holes. As can be readily understood, as Toda fails to disclose or suggest a wiring board that includes a pair of through-holes, Toda also does not disclose or suggest inserting a piezoelectric actuator made of a piezoelectric bi-morph device into one of a pair of the through-holes and then another from an opposite surface side.

Claim 15 recites a method for producing an input apparatus for detecting that the front surface of a panel is pressed or touched and inputting data corresponding to the detected result. Claim 15 further recites (emphasis added):

forming a pair of through-holes aligned in a flexible wiring board on which a pattern of predetermined electrodes are formed and straightly cutting a part between the pair of the through-holes;

mounting a piezoelectric actuator made of a piezoelectric bi-morph device on the flexible wiring board so that the piezoelectric actuator bridges the pair of the through-holes and soldering and electrically connecting wiring terminals formed at one end portion of the piezoelectric actuator and the predetermined electrodes formed on the flexible wiring board;

pulling out the part formed between the pair of the through-holes in the flexible wiring board so that the part is positioned on the upper surface of the piezoelectric actuator; and

mounting the flexible wiring board so that the piezoelectric actuator contacts the panel except for the part formed between the pair of the through-holes in the flexible wiring board.

As discussed above, Toda fails to disclose or suggest a flexible wiring board that includes a pair of through-holes. As can be readily understood, as Toda fails to disclose or suggest a wiring board that includes a pair of through-holes, Toda also does not disclose or suggest mounting a piezoelectric actuator made of a piezoelectric bi-morph device on the flexible wiring board so that the piezoelectric actuator *bridges a pair of through-holes*.

II. CONCLUSION

Appellants respectfully submit the U.S. PTO has failed to establish a *prima facie* case of obviousness in view of the clear factual and legal deficiencies outlined above. Accordingly, it is respectfully requested the Final Action dated December 29, 2008 be WITHDRAWN. A Notice of Allowance for Claims 1-17 is earnestly solicited.

Respectfully submitted,

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